1 QUENCE LISTING <110> Gaiger, Alexander Cheever, Martin A. <120> COMPOSITIONS AND METHODS FOR WT1 SPECIFIC IMMUNOTHERAPY <140> US 09/164,223 <141> 1998-09-30 <170> PatentIn Ver. 2.0 <213> Homo sapiens Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro Ser Leu Gly Gly <213> Homo sapiens Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu

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 <212> PRT
 <213> Mus musculus
 <400> 306
 Tyr Phe Lys Leu Ser His Leu Gln Met
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<400> 307
Tyr Gln Met Thr Ser Gln Leu Glu Cys
<210> 308
<211> 9
<212> PRT
<213> Mus musculus
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Tyr Ser Ser Asp Asn Leu Tyr Gln Met
<210> 309
<211> 6
<212> PRT
<213> Homo sapiens
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Gly Ala Ala Gln Trp Ala
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Ala Ser Ala Tyr Gly Ser Leu Gly Gly Pro Ala Pro
                 5
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 Ala Phe Thr Val His Phe Ser Gly Gln Phe Thr Gly Thr Ala Gly
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<213> Homo sapiens

<400> 312 His Ala Ala Gln Phe 1 5

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<211> 32

<212> PRT

<213> Homo sapiens

<400> 313

Cys His Thr Pro Thr Asp Ser Cys Thr Gly Ser Gln Ala Leu Leu Leu 1 5 10 15

Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr Gln Met Thr Ser Gln Leu 20 25 30

<210> 314

<211> 32

<212> PRT

<213> Homo sapiens

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1 5 10 15

Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser 20 25 30

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<400> 315

Arg Tyr Phe Lys

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<210> 316

<211> 14

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Glu Arg Arg Phe Ser Arg Ser Asp Gln Leu Lys Arg His Gln
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Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr
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His Thr Gly Lys Thr Ser
             20
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<211> 21
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<213> Homo sapiens
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Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn
                                      10
Met His Gln Arg Asn
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 <211> 449
 <212> PRT
 <213> Homo sapiens
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 Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro
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 Ser Leu Gly Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala
              20
 Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr
          35
 Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Pro Pro Pro Pro Pro
                                               60
                          55
      50
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Pro 65	Pro	Pro	Pro	His	Ser 70	Phe	Ile	Lys	Gln	Glu 75	Pro	Ser	Trp	Gly	Gly 80
Ala	Glu	Pro	His	Glu 85	Glu	Gln	Cys	Leu	Ser 90	Ala	Phe	Thr	Val	His 95	Phe
Ser	Gly	Gln	Phe 100	Thr	Gly	Thr	Ala	Gly 105	Ala	Cys	Arg	Tyr	Gly 110	Pro	Phe
Gly	Pro	Pro 115	Pro	Pro	Ser	Gln	Ala 120	Ser	Ser	Gly	Gln	Ala 125	Arg	Met	Phe
Pro	Asn 130	Ala	Pro	Tyr	Leu	Pro 135	Ser	Cys	Leu	Glu	Ser 140	Gln	Pro	Ala	Ile
Arg 145	Asn	Gln	Gly	Tyr	Ser 150	Thr	Val	Thr	Phe	Asp 155	Gly	Thr	Pro	Ser	Tyr 160
Gly	His	Thr	Pro	Ser 165	His	His	Ala	Ala	Gln 170	Phe	Pro	Asn	His	Ser 175	Phe
Lys	His	Glu	Asp 180	Pro	Met	Gly	Gln	Gln 185	Gly	Ser	Leu	Gly	Glu 190	Gln	Gln
Tyr	Ser	Val 195	Pro	Pro	Pro	Val	Tyr 200	Gly	Cys	His	Thr	Pro 205	Thr	Asp	Ser
Cys	Thr 210		Ser	Gln	Ala	Leu 215	Leu	Leu	Arg	Thr	Pro 220	Tyr	Ser	Ser	Asp
Asn 225		Tyr	Gln	Met	Thr 230	Ser	Gln	Leu	Glu	Cys 235	Met	Thr	Trp	Asn	Gln 240
Met	Asn	Leu	Gly	Ala 245		Leu	Lys	Gly	Val 250	Ala	Ala	Gly	Ser	Ser 255	Ser
Ser	Val	Lys	260	Thr	Glu	Gly	Gln	Ser 265	Asn	His	Ser	Thr	Gly 270	Tyr	Glu
Ser	Asp	275		s Thr	Thr	Pro	1le 280		Cys	: Gly	· Ala	Gln 285	Tyr	Arg	Ile
His	Thr 290		Gly	y Val	. Phe	Arg 295		' Ile	Glr	n Asp	Val 300	Arg	Arg	Val	Pro
Gly 305		L Ala	a Pro	o Thr	Leu 310		. Arg	Ser	Ala	Ser 315	Glu	Thr	Ser	Glu	Lys 320
Arg	g Pro	o Phe	e Met	t Cys 325		туг	Pro	Gly	7 Cys		Lys	arg	Туг	335	Lys

Leu Ser His Leu Gln Met His Ser Arg Lys His Thr Gly Glu Lys Pro 340 345 350

Tyr Gln Cys Asp Phe Lys Asp Cys Glu Arg Arg Phe Ser Arg Ser Asp 355 360 365

Gln Leu Lys Arg His Gln Arg Arg His Thr Gly Val Lys Pro Phe Gln 370 375 380

Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr 385 390 395 400

His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys 405 410 415

Arg Trp Pro Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val 420 425 430

Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu Gln Leu Ala 435 440 445

Leu

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Ser Leu Gly Gly Gly Gly Cys Gly Leu Pro Val Ser Gly Ala Ala 20 25 30

Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr 35 40 45

Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro Pro Pro 50 55 60

Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly 65 70 75 80

Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Leu His Phe
85 90 95

Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe

			100					105					110		
Gly	Pro	Pro 115	Pro	Pro	Ser	Gln	Ala 120	Ser	Ser	Gly	Gln	Ala 125	Arg	Met	Phe
Pro	Asn 130	Ala	Pro	Tyr	Leu	Pro 135	Ser	Cys	Leu	Glu	Ser 140	Gln	Pro	Thr	Il∈
Arg 145	Asn	Gln	Gly	Tyr	Ser 150	Thr	Val	Thr	Phe	Asp 155	Gly	Ala	Pro	Ser	Туг 160
Gly	His	Thr	Pro	Ser 165	His	His	Ala	Ala	Gln 170	Phe	Pro	Asn	His	Ser 175	Phe
Lys	His	Glu	Asp 180	Pro	Met	Gly	Gln	Gln 185	Gly	Ser	Leu	Gly	Glu 190	Gln	Glr
Tyr	Ser	Val 195	Pro	Pro	Pro	Val	Tyr 200	Gly	Cys	His	Thr	Pro 205	Thr	Asp	Sei
Суз	Thr 210	Gly	Ser	Gln	Ala	Leu 215	Leu	Leu	Arg	Thr	Pro 220	Tyr	Ser	Ser	Asp
Asn 225	Leu	Tyr	Gln	Met	Thr 230		Gln	Leu	Glu	Cys 235	Met	Thr	Trp	Asn	Gl: 240
Met	Asn	Leu	Gly	Ala 245	Thr	Leu	Lys	Gly	Met 250	Ala	Ala	Gly	Ser	Ser 255	Se
Ser	Val	Lys	Trp 260		Glu	Gly	Gln	Ser 265		His	Gly	Ile	Gly 270	Tyr	Glı
Ser	Asp	Asn 275		Thr	Ala	Pro	Ile 280		Cys	Gly	Ala	Gln 285	Tyr	Arg	Ile
His	Thr 290		Gly	Val	Phe	Arg 295	Gly	Ile	Gln	Asp	Val 300	Arg	Arg	Val	\$e:
Gly 305		Ala	Pro	Thr	Leu 310		Arg	Ser	Ala	Ser 315		Thr	Ser	Glu	Lу 32
Arg	Pro	Phe	. Met	Cys 325		Tyr	Pro	Gly	330		Lys	Arg	Tyr	Phe 335	Ly
Leu	Ser	His	340		. Met	. His	s Ser	Arg 345		His	Thr	Gly	Glu 350	Lys	Pr
Tyr	Gln	355		Phe	. Lys	: Asp	360		Arg	Arg	Phe	Ser 365	Arg	Ser	As
Glr	Let	ı Lys	arg	His	Glr	ı Arç	g Arg	, His	Thr	Gly	Val	Lys	Pro	Phe	Gl

370 375 380

Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr 385 390 395 400

His Thr Arg Thr His Thr Gly Lys Thr Ser Glu Lys Pro Phe Ser Cys 405 410 415

Arg Trp His Ser Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val 420 425 430

Arg His His Asn Met His Gln Arg Asn Met Thr Lys Leu His Val Ala 435 440 445

Leu